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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/071,726	02/08/2002	Jeffrey R. Moritz	P00548-US-1 (14913.0020)	3222
28078	7590	05/08/2006	EXAMINER	
MAGINOT, MOORE & BECK, LLP CHASE TOWER 111 MONUMENT CIRCLE SUITE 3250 INDIANAPOLIS, IN 46204			GORDON, BRIAN R	
			ART UNIT	PAPER NUMBER
			1743	

DATE MAILED: 05/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No. 10/071,726	Applicant(s) MORITZ ET AL.	
	Examiner Brian R. Gordon	Art Unit 1743	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 2-23-06.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 8-12 is/are allowed.
- 6) ☒ Claim(s) 1,2,4-7 and 13-36 is/are rejected.
- 7) ☒ Claim(s) 3 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 4-20-05 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed February 23, 2006 have been fully considered but they are not persuasive.

At applicant's request, a pre-appeal conference was held with Jill Warden and Roy King. Both agreed with the examiner's previous position and suggested further rejections of claims previously indicated as allowable.

Applicant's specification specifically discloses the construction material or electrically conductive plastic as being polypropylene impregnated with carbon. However, applicant states polypropylene containing carbon fillers is not a disclosure of an "electrically conductive plastic material". There is no structural difference between the two materials. For reasoning as stated above, the examiner disagrees and asserts the two materials are structurally equivalent.

Applicant asserts there is no motivation to conclude the molded rack of Mehra should be comprised of electrically conductive plastic material. The examiner asserts no motivation or modifying in this respect is required, for the device is made of electrically conductive plastic material as stated above.

Applicant further asserts the whether not a material is electrically conductive or not depends upon the concentration of carbon. However, applicant has not provided any such evidence to prove such or establish what is the required amount to validate such an assertion. However it is generally known that carbon fillers are electrically conductive as evidenced by the article "*Determination and Modelling of Synergist*

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Effects of Carbon Based Conductive fillers for Electrically and Thermally Conductive Resins". While concentration is not an issue of claim 1, the article actually provides support for the fact that carbon black provides for electrical conductivity even with low amounts of loading.

For reasons given herein above, the previous rejections are hereby maintained.

Drawings

1. The drawings were received on April 20, 2005. These drawings are acceptable.

Claim Interpretation

2. The claims recites the rack is for holding a plurality of pipette tips. The "for" clause in the preamble expresses intended use of the device.

It has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987).

As to the functionality of the device being intended for specifically dissipating a charge from a pipette tip.

The functional recitation that the rack discharges a static electrical charge deposited on a pipette tip has not been given patentable weight because it is in narrative form. In order to be given patentable weight, a functional recitation must be expressed as a "means" for performing the specified function, as set forth in 35 USC 112, 6th paragraph, and must be supported by recitation in the claim of sufficient structure to warrant the presence of the functional language. *In re Fuller*, 1929 C.D. 172; 388 O.F.279.

The examiner interprets any prior art structure that has a face having a plurality of seats, at least one sidewall depending from the face and wherein the side face and side wall of being comprised of an electrically conductive plastic as meeting the limitations of claim.

Claim 21, 34 and 35 recite references to the dimensions of the device. The seats are designed and dimensioned to hold pipette tips and the rack is dimensioned to dissipate static electricity. The claims does not specify any numerical values for the dimensions which would be considered adequate to achieve the cited results. The claims do not further structurally limit the device but moreso express intended use. Pipettes may be molded or manufactured a various sizes therefore any rack opening may be considered suitable for holding pipette tips and dissipating electrical charges.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 33-36 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As to claim 33, it is unclear how and what grounds the device. There is no additional structure provided as to indicate a means for grounding the device. Stating the device is grounded suggests applicant's intent, but fails to add any further structure to that previously claimed.

Claims 21, 34, and 35 are directed to the device being dimensioned to perform or achieve a desired function. The claims do not specify what are the particular dimensions required to achieve the desired functions, hence there are no additional structures required of the previously claimed device. It is unclear what limitations applicant would consider adequate or inadequate for achieving the functions.

Claims 35-36 are directed to unclaimed elements. The claims of the invention are directed to tip rack. While applicant intends for the device to be used in conjunction with a plurality of pipettes, multiple pipette device, and laboratory microplate, none of these elements are positively recited as elements of the tip rack or in a combination. As such, claims 35-36 are not considered further structurally limiting claims, but yet are considered intended use.

Claim Rejections - 35 USC § 103

5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

6. Claims 1, 4-7, 13, 17-19, 20-22, 25-28, and 32-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mehra US 4,588,095.

Mehra discloses a single-piece, injection molded rack for holding test tubes or similar articles and a mold for producing the same.

As shown in FIG. 2, the rack includes a top tier 12, an intermediate tier 14, and a bottom tier 16, selectively interconnected in spaced-apart, superposed relation. For holding test tubes or similar articles, the top tier 12 and intermediate tier 14 have apertures 11 (forming seats) and 13, respectively.

The rack also includes sidewalls or supports 20.

The rack in accordance with the invention can be made from any suitable injection molding material, such as, for example, polyethylene, polypropylene, polystyrene, high-impact polystyrene, polycarbonate, polyamides, polyacetals, polyurethane, and the like. The injection molding material can also contain fillers, glass

fibers, carbon black, carbon fibers, boron fibers, silica, titanium dioxide, and the like.

Glass fibers are a preferred filling material (column 10, lines 26-34).

It would have further been obvious to optimize the amount of carbon black embedded within the rack in order provide sufficient strength to support he weight of the articles held therein.

Mehra does not refer to the rack as a pipette tip rack.

However Mehra does teach modifications may be particularly desirable where the mold is to be used to provide a rack that is to be used for purposes other than holding test tubes. For example, such modifications may be useful in packaging, storage, and shipping of various kinds of containers for liquids and the like. It is fully intended that the inventive concepts for both the rack and mold not be limited merely to the holding of test tubes (column 17, lines 4-12). Therefore the rack may be capable of holding pipette tips and various other items.

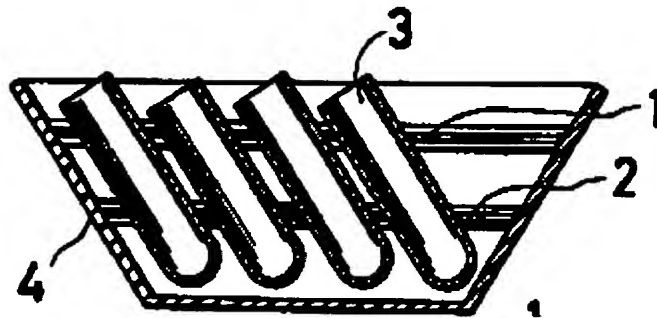
7. Claims 1-2, 4-7, 13-19, 20-23, and 25-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iizuka et al. US 4,060,457 in view of Mehra US 4,588,095.

Iizuka et al. discloses tube holder in which the angle at which the tubes are held is variable, and a box reservoir in which the above holder with the tubes can be laid.

The tube holder is preferably constituted by upper panel 1 (face having a plurality of seats) and lower panel 2 which have means to hold each tube in the usual manner and which can be slid horizontally. (column 1, lines 40-42).

Variable angle tube holder used in this invention may be made of glass, metals, plastics **or composite of these materials**. The upper and lower panels may be a plate

with holes which can hold tubes, or a composite of wires or sticks. (column 2, lines 40-44)



As seen in the figure above sidewall (4) depends downward from face 1.

lizuka it al does not specifically describe the holder as being comprised of an electrically conductive plastic.

Mehra discloses a single-piece, injection molded rack for holding test tubes or similar articles and a mold for producing the same.

The rack in accordance with the invention can be made from any suitable injection molding material, such as, for example, polyethylene, polypropylene, polystyrene, high-impact polystyrene, polycarbonate, polyamides, polyacetals, polyurethane, and the like. The injection molding material can also contain fillers, glass fibers, carbon black, carbon fibers, boron fibers, silica, titanium dioxide, and the like. Glass fibers are a preferred filling material (column 10, lines 26-34).

Such a rack that can be offered more economically to the end user. Since the unique configurations of both the rack and the mold are adapted to a wide variety of plastic materials, racks can be produced to exhibit functional characteristics ranging from durability and reusability to single-use disposability.

It would have been obvious to one of ordinary skill in the art at the time of the invention recognize that the plastic material of lizuka may be substituted with the polypropylene carbon filled material as taught by Mehra in order to produce an economical rack capable of holding pipette tips.

It would have further been obvious to optimize the amount of carbon black embedded within the rack in order provide sufficient strength to support the weight of the articles held therein.

The carbon filled polypropylene is the same material as disclosed by applicant as such the material inherently has the same properties and is considered to be an electrically conductive plastic material.

Furthermore, as stated above it is understood that applicant intends for the device to be employed as a tip holder; however, the structure of applicant's invention does not limit it from being capable of holding test tubes and vice versa when applied to the device of lizuka.

As to claims 2, 14, 16, and 22-23, the lower panel, is considered a support insert as claimed by applicant.

8. Claims 15 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over lizuka as applied to claims 1-2, 4-7, 13-19, 20-23, and 25-36 above, and further in view of Pearlman US 5,950,832.

lizuka et al. do not disclose the insert panel as comprising polypropylene.

Pearlman teaches many racks for vials fall into two structural types (see above Fisher Catalog). One type consists of an injection-molded solid or hollow plastic block,

e.g., molded polyethylene, polypropylene, polycarbonate, or acrylic, containing a rectilinear array of cylindrical holes to support cylindrical and conically bottomed specimen vials. Also described is a rack made of polyester foam which has resilient sockets. Another type of rack is reminiscent of a traditional rectangular test tube rack, and contains square openings.

A sheet material, such as 2-6 pound per cubic foot density closed-cell polyethylene, polypropylene, or a copolymer foam material between approximately 1/16 and 1 inch thick, is selected which can be readily perforated with round or square holes (e.g., by die-cutting), and which retains long term elastic memory following linear compression and/or extension of up to at least 25%.

It would have been obvious to one of ordinary skill in the art at the time of the invention to manufacture panel 2 (insert) of lizuka from polypropylene to readily allow holes to be cut into it to accommodate the tubes.

Allowable Subject Matter

9. Claims 8-12 are allowed.
10. Claims 3 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
11. The following is a statement of reasons for the indication of allowable subject matter: The prior art of record does not teach nor fairly suggest: A method of discharging static electricity from a plurality of pipette tips held by a plurality of pipettes, the method comprising: a. providing a tip rack comprised of an electrically conductive

plastic material, the tip rack including a face with a plurality of seats formed thereon for holding pipette tips; b. removing the plurality of pipette tips from the plurality of pipettes; and c. seating the plurality of pipette tips in the plurality of seats such that the static electricity deposited on the pipette tips is discharged through the tip rack when the pipette tips are contacted with the tip rack.

12. The prior art of record does not teach nor fairly suggest the rack comprises a support insert comprising a plurality of support walls that form chambers (or individual, separate compartments) dimensioned to receive pipette tips.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian R. Gordon whose telephone number is 571-272-1258. The examiner can normally be reached on M-F, with 2nd and 4th F off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on 571-272-1267. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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brg